

NOV 04 2005

Docket 59057  
Serial No. 10/615,562

PATENT APPLICATION

**AMENDMENTS TO THE CLAIMS**

1 1. (currently amended) A tooth extraction device, comprising:

2 a handle;

3 a clamp assembly attached to said handle, said clamp assembly comprising a structure for  
4 clamping a tooth to be extracted; and

5 a cable attached to the clamp assembly for moving the clamp assembly relative to the  
6 handle to extract a tooth;

7 wherein said clamp assembly comprises a pair of clamp links pivotally connected to a  
8 carrier block, said clamp links being rotatable to engage opposite sides of a tooth,  
9 and said carrier block being movable relative to the handle to extract the tooth;

10 wherein the carrier block is slidable relative to the handle; and

11 wherein said clamp links and said carrier block are arranged such that movement of the  
12 cable in a first direction first causes said clamp links to rotate into engagement  
13 with opposite sides of a tooth and then subsequently causes said carrier block to  
14 slide along the handle to extract the tooth.

1 2. (original) The tooth extraction device according to claim 1, wherein said structure for

2 clamping a tooth comprises a pair of clamp links that engage opposite sides of the tooth.

Docket 59057  
Serial No. 10/615,562

## PATENT APPLICATION

1           3. (original) The tooth extraction device according to claim 1, wherein said clamp  
2   assembly is attached to the handle such that moments applied to the handle are transferred to the  
3   tooth to be extracted.

1           4. (original) The tooth extraction device according to claim 1, further comprising a  
2   manually operated trigger connected to the cable, said trigger being operable to move the cable  
3   relative to the handle.

1           5. (original) The tooth extraction device according to claim 4, further comprising a pinion  
2   connected to the trigger for rotation with the trigger, and a rack connected to the cable, the rack  
3   and pinion being intermeshed such that rotation of the trigger causes movement of the cable and  
4   the clamp assembly relative to the handle.

1           6. (canceled)

1           7. (canceled)

1           8. (canceled)

Docket 59057  
Serial No. 10/615,562

## PATENT APPLICATION

1           9. (currently amended) The tooth extraction device according to claim 8 1, wherein said  
2 clamp assembly comprises a wedge attached to a free end of the cable, said wedge increasing in  
3 thickness in a direction away from the cable, and said clamp links each having a surface that  
4 engages a respective opposing side of said wedge, whereby movement of said wedge relative to  
5 said clamp links causes said clamp links to rotate on said carrier clamp assembly comprises a  
6 pair of toggle links connected to a free end of the cable, said toggle links each being connected to  
7 a respective one of said clamp links, whereby movement of said toggle links relative to said  
8 carrier block causes said clamp links to rotate on said carrier block.

1           10. (currently amended) The tooth extraction device according to claim 8 1, wherein said  
2 clamp assembly comprises a pair of toggle links connected to a free end of the cable, said toggle  
3 links each being connected to a respective one of said clamp links, whereby movement of said  
4 toggle links relative to said carrier block causes said clamp links to rotate on said carrier block

1           11. (currently amended) The tooth extraction device according to claim 1, wherein said  
2 handle has a handgrip portion at a first end, the clamp assembly attached to a second end, and an  
3 elongated neck portion extending between the first and second ends, and wherein the cable  
4 extends through the neck portion to an actuator located within the handle.

1           12. (Original) The tooth extraction device according to claim 1, further comprising at  
2 least one support for engaging a neighboring tooth to provide a reaction force when extracting a  
3 tooth.

Docket 59057  
Serial No. 10/615,562

## PATENT APPLICATION

1           13. (original) The tooth extraction device according to claim 12, wherein said at least one  
2 support comprises a base support for engaging a first neighboring tooth on a proximal side of the  
3 clamp assembly, and a removable tooth support for engaging a second neighboring tooth on a  
4 distal side of the clamp assembly.

1           Claims 14-17 (canceled)

1           18. (currently amended) A tooth extraction device, comprising:  
2 a handle;  
3 a clamp assembly attached to said handle, said clamp assembly comprising a pair of  
4 clamp links pivotally connected to a carrier block, said clamp links being  
5 rotatable to engage opposite sides of a tooth, and said carrier block being slidably  
6 movable relative to the handle to extract the tooth;  
7 a cable attached to the clamp assembly for moving the clamp assembly relative to the  
8 handle to extract a tooth;  
9 an actuator for moving the cable within the handle; and  
10 a support for engaging a neighboring tooth to provide a reaction force when extracting a  
11 tooth; and  
12 wherein said clamp assembly and said carrier block are arranged such that movement of  
13 the cable in a first direction first causes said clamp links to rotate into engagement  
14 with opposite sides of a tooth and then subsequently causes said carrier block to  
15 slide along the handle to extract the tooth.

Docket 59057  
Serial No. 10/615,562

## PATENT APPLICATION

1           19. (original) The tooth extraction device according to claim 18, further comprising a  
2 manually operated trigger connected to the cable, said trigger being operable to move the cable  
3 relative to the handle.

1           20. (original) The tooth extraction device according to claim 19, further comprising a  
2 pinion connected to the trigger for rotation with the trigger, and a rack connected to the cable, the  
3 rack and pinion being intermeshed such that rotation of the trigger causes movement of the cable  
4 and the clamp assembly relative to the handle.

5

1           21. (canceled)